

IN THE CLAIMS

Please amend the claims as follows:

1. (original) Method of signal reconstruction comprising a dynamic range control processing of an input signal of an image to generate an output signal of the image, the method comprising the steps of:
 - providing the input signal;
 - determining an amount by:
 - specifying an input range of the input signal, and
 - specifying an output range of the output signal,
 - selecting a convex function as a non-linear transfer characteristic capable of compressing the input signal according to the amount of dynamic range control processing;
 - processing the input signal wherein the input signal is transferred by means of the convex function;
 - generating the output signal as a result of the processing.

2. (original) The method according to claim 1, characterized in that at least a peak value and/or an exposure average value taken from the signal is used to determine the input range and/or the output range, in particular taken by measurement and/or histogram

analysis of the signal, in particular taken from a luminance signal.

3. (currently amended) The method according to claim ~~1 or 2~~, characterized in that the input signal is compressed if a peak value of the input signal exceeds the output range.

4. (currently amended) The method as claimed in ~~any one of claims 1 to 3~~ claim 1, characterized in that the input signal is compressed with regard to a mere fraction of the image.

5. (currently amended) The method as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the convex function is selected depending on the input range and/or the output range.

6. (currently amended) The method as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the convex function is formed by at least a first and a second part having a kneepoint as a point of intersection of the first and the second part wherein the first part of the convex function has an average steepness exceeding the average steepness of the second part.

7. (original) The method as claimed in claim 6, characterized in that the kneepoint is located on the convex function at a specified kneelevel separating the first part and the second part.

8. (currently amended) The method as claimed in ~~claims 6 or 7~~claim 6, characterized in that each of the first and the second part of the convex function is formed by a linear function having a constant steepness.

9. (currently amended) The method as claimed in ~~any one of claims 6 to 8~~claim 6, characterized in that the convex function is selected by varying the steepness of the second part, in particular by simultaneously keeping the kneelevel constant.

10. (currently amended) The method as claimed in ~~any one of claims 6 to 8~~claim 6, characterized in that the convex function is selected by varying the kneelevel of the convex function, in particular by simultaneously keeping the steepness of the second part constant.

11. (currently amended) The method as claimed in ~~any one of claims 6 to 10~~claim 6, characterized in that the convex function is selected depending on the input and/or the output range, wherein a

combination of varying the steepness and varying the kneelevel is available.

12. (currently amended) The method as claimed in ~~any one of claims 6 to 11~~claim 6, characterized in that varying the steepness of the second part is selected if the input range of the input signal exceeds a pre-determined threshold level.

13. (currently amended) The method as claimed in ~~any one of the preceding claims~~claim 1, characterized in that the image signal comprises a number of components, in particular a luminance component and/or one or more color components.

14. (original) The method as claimed in claim 13, characterized in that the image signal is formed by a Y-UV-signal or an RGB-signal.

15. (currently amended) The method as claimed in ~~one of the preceding claims~~claim 1, characterized in that the amount of dynamic range control processing is determined on a Y-signal, in particular a Y-signal derived from an R-, G- and B-component or determined on at least one component of an R-, G- or B-component.

16. (currently amended) The method as claimed in ~~one of the preceding claims~~claim 1, characterized in that the input signal is a digital signal.

17. (original) The method as claimed in claim 16, characterized in that the digital signal is received from a white signal balancing module and, in particular, the output signal is applied to a gamma-control module.

18. (currently amended) The method as claimed in ~~any one of the claims 16 or 17~~claim 16, characterized in that an amount of compression range is commonly applied to all components of the image signal for dynamic range control processing and/or the components are processed by means of a convex function common to all components of the image signal.

19. (currently amended) The method as claimed in ~~any one of claims 1 to 15~~claim 1, characterized in that the input signal is an analog signal.

20. (currently amended) The method as claimed in ~~any one of claims 1 to 15 and claim 19~~claim 1, characterized in that the input signal is received from a sensor, in particular a sensor matrix

and, in particular, the output signal is applied to an analog digital converter.

21. (currently amended) The method as claimed in ~~any one of claims 1 to 15 and 19 to 20~~claim 1, characterized in that at least one of the components of the image signal is processed by transferring the at least one component by means of a specific convex function according to a pre-determined amount of dynamic range control processing, which has been determined specifically for the at least one component.

22. (currently amended) The method as claimed in ~~any one of the preceding claims~~claim 1, characterized in that the steepness, and/or the kneelevel and/or the input range is determined from a specific signal component, in particular a luminance signal, and is selected for all signal components.

23. (currently amended) The method as claimed in ~~any one of the preceding claims~~claim 1, characterized in that the steepness, and/or the kneelevel and/or the input range is selected according to a sensor matrix and/or a temperature value of the image for each component of the signal, in particular for a color component.

24. (currently amended) The method as claimed in ~~any one of~~
~~claims 1 to 15 and 19 to 23~~claim 1, characterized in that the input
range and/or the output range is determined from a digital signal.

25. (currently amended) The method as claimed in ~~any one of~~
~~claims 1 to 15 and 19 to 24~~claim 1, characterized in that an
exposure measurement is provided in a loop in parallel with the
dynamic range control processing.

26. (currently amended) The method as claimed in ~~any one of~~
~~claims 1 to 15 and 19 to 25~~claim 1, characterized in that a white
balance control is provided in a loop in parallel with the dynamic
range control processing.

27. (currently amended) The method as claimed in ~~claims 25 or~~
~~26~~claim 25, characterized in that original data of the input signal
are retrieved and the original data are provided to an exposure
measurement and a white balance control.

28. (original) The method as claimed in claim 27, characterized
in that the original data of the input signal are retrieved by
means of an inverse non-linear transfer characteristic.

29. (currently amended) The method as claimed in claim 27~~and 28~~, characterized in that the exposure measurement is controlled to assign the maximum output signal amplitude to a peak value of white.

30. (original) Imaging device for signal reconstruction comprising a means for dynamic range control processing of an input image signal to generate an output image signal, the image device comprising:

- an input means for providing an input signal;
- a means for determining an amount comprising:
 - a means for specifying an input range of the input signal, and
 - a means for specifying an output range of the output signal;
- a computing means for selecting a convex function as a non-linear transfer characteristic capable of compressing the input signal according to the amount of dynamic range control processing;
- a processing means for transferring the input signal by means of the convex function;
- an output means for generating the output signal from the signal received by the processing means.

31. (currently amended) Computer program product storable on a medium readable by a computer system, comprising a software code section, which induces the computer system to execute the method as claimed in ~~any one of the preceding method claims~~claim 1 when the product is executed on the computer system.

32. (original) The computer program product as claimed in claim 31 comprising a module for calculation of a dynamic look-up table for selection of a convex function as a non-linear transfer characteristic depending on at least one of the parameters selected from the group consisting of: peak value, exposure average value, input range, output range and temperature value.

33. (currently amended) The computer program product as claimed in ~~claims 31 or 32~~claim 31, characterized by a module for calculating an inverse dynamic look-up table as an inverse non-linear transfer characteristic.

34. (currently amended) The computer program product as claimed in ~~any one of claims 31 to 33~~claim 31, characterized by a module for calculating a dynamic look-up table and/or an inverse dynamic look-up table if the input signal is an analog signal and which is

specifically adapted for at least one component of the input signal.